

**Transportation Knowledge
Networks:
A Management Strategy for the
21st Century**

**Francis Francois
TRB Annual Meeting, Session 702
January 25, 2006**

Study Impetus and Sponsor

- **Public and private professionals increasingly seek rapid delivery of transportation information**
- **Libraries, however, have been downsizing or closing**
- **Users today are demanding information services more geared to the internet and new information technologies**
- **Concerned about the situation, AASHTO asked TRB to conduct a policy study, with funding from AASHTO through the NCHRP program**

Study Charge

Provide strategic advice to the federal government and states on how transportation information should be provided and managed, including

- Core services,**
- Sustainable administrative structure, and**
- Funding options**

to meet the needs of the public and private transportation sectors.

Study Audience and Focus

- **Users**
 - **State DOTs**
 - **MPOs, transit agencies, local governments**
 - **Universities**
 - **Private sector**
- **All types of transportation information**
- **Information services generally, not just libraries**

NRC Study Committee Process

- **Formation of committee of experts**
- **Committee deliberation and report preparation**
- **Report review**
- **Report publication and dissemination**

Study Committee

Chair: Francis Francois, NAE

Areas of Expertise:

- Information and computer science
- Library science and management
- Transportation policy and research
- Transportation agency and research administration

Committee for a Future Strategy for Transportation Information Management

- **Francis Francois**, *Chair*, AASHTO (retired)
- **Gary R. Allen**, Virginia DOT, Charlottesville
- **Lance R. Grenzeback**, Cambridge Systematics, Inc.,
Cambridge, MA
- **Robert C. Johns**, University of Minnesota, Minneapolis
- **R. David Lankes**, Syracuse University, NY
- **Charles R. McClure**, Florida State University,
Tallahassee

Committee for a Future Strategy for Transportation Information Management (cont'd)

- **Nina McLawhorn**, Wisconsin DOT, Madison
- **Michael D. Meyer**, Georgia Institute of Technology, Atlanta
- **Ellen (Leni) Oman**, Washington State DOT, Olympia
- **Bonnie A. Osif**, Pennsylvania State University, University Park
- **Roberto A. Sarmiento**, Northwestern University, Evanston, Ill.
- **Lisa Zeimer**, Parsons Brinckerhoff Quade and Douglas, Baltimore

Study Approach

- Review of scoping study
- Review of transportation user needs
- Review of national libraries, networks, and consortium arrangements as potential models for transportation sector

Transportation Information Management System Vision

Original vision for transportation information system dates back to 1972

“Technical information needs of the research community can be met effectively and served best by . . . an evolving network of transportation research information services whose overall scope and capabilities are coordinated at the national level.”

Key System Elements

- **TRIS bibliographic database (since 1970)**
- **Transportation Thesaurus (1996)**
- **OCLC + TLCaT (2004)**
- **Establishment of NTL (1998)**
- **Pilot Midwest regional consortium (MTKN) (2001)**
- **Transportation library connectivity pooled-fund project (2005)**

Key System Gaps

- **Lack of coordinating mechanism with national focus for information identification, collection, and preservation**
- **Lack of sustained financial support**

Recommendations

Network Development

Establish TKNs in every U.S. region and at the federal level

- Networks are organizing structure of the digital age
- MTKN as a model
- NTL to lead federal TKN

Recommendations (cont'd)

National-Level Coordinating Structure

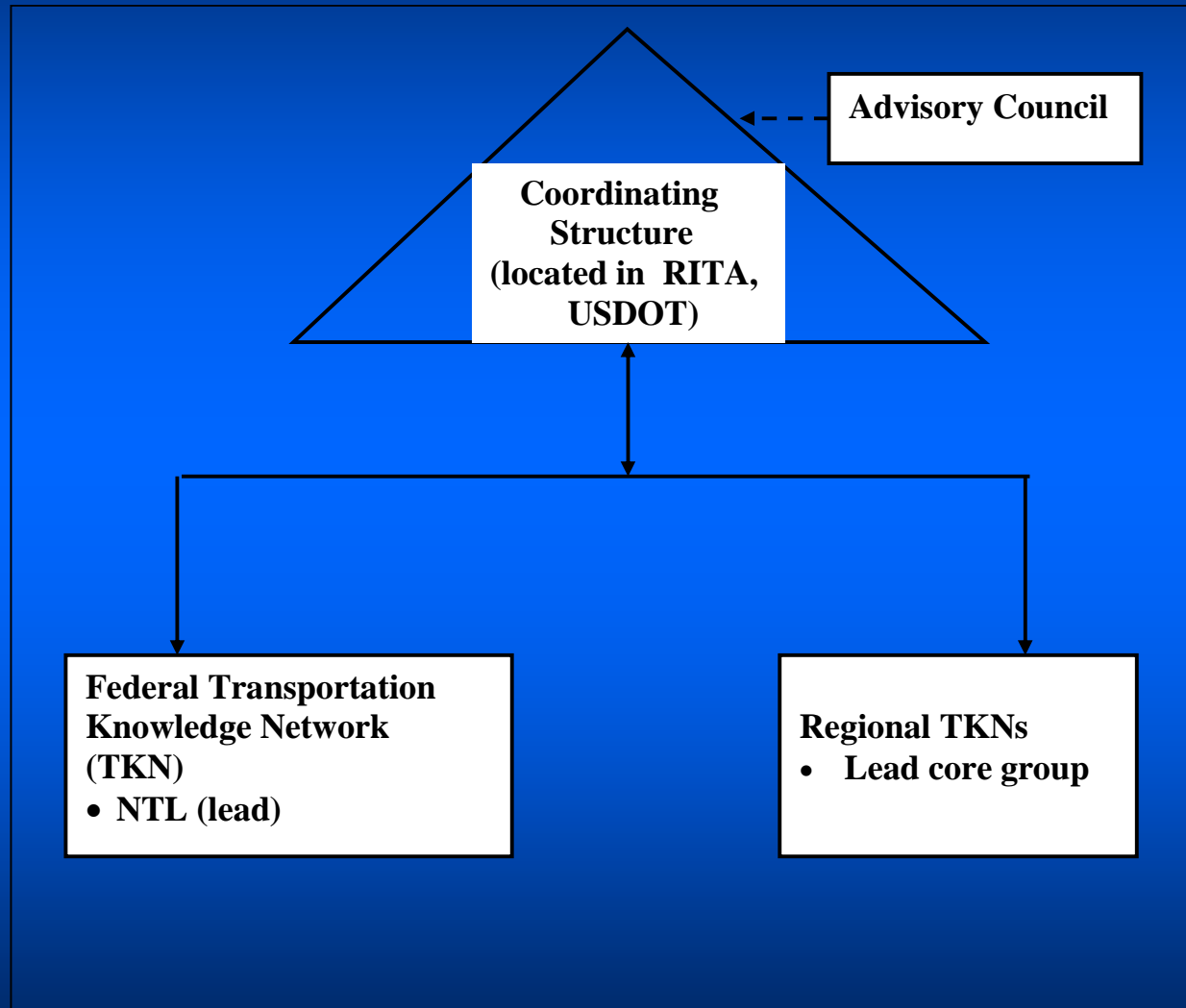
Create a national-level coordinating structure at U.S. DOT within the Research and Innovative Technology Administration to manage and coordinate activities of TKNs

Recommendations (cont'd)

Governance

- Reconstituted Advisory Council on Transportation Statistics to become governance body for the coordinating structure
- External peer reviews of coordinating structure and TKNs
- TKN-organized nonprofit association external to U.S. DOT

Proposed Nationwide System for Transportation Information Management



Recommendations (cont'd)

Funding

- First 3 years: Annual federal grants of \$3-5 million to set up coordinating structure and establish regional & federal TKNs
- Years 3+: Annual budget of \$7.5-13 million – federal grants + required local match for network operations

Funding Options

Federal

- Title V – next reauthorization
- Possible separate appropriation

Possible State, University, and Local Sources

- SP&R
- Title 1
- University Transportation Centers
- Other local (e.g., transit, MPO, municipal)

Next Steps

- **NCHRP project to develop business plan and build stakeholder support**
- **RITA to establish and fund coordinating structure**
- **Congress to amend legislation for Advisory Council**

Benefits of Proposed Transportation Information Management System

- **Leadership**
- **Improved access to transportation information by users**
- **Leveraging resources through network efficiencies**
- **Professional capacity building and training for users**

END RESULT – BETTER TRANSPORTATION FOR ALL

Where to Find the Report and Report Summary

http://trb.org/news/blurbs_detail.asp?id=5789

or

Online at the TRB website—www.TRB.org